

Work Order ID 139730 - 2

139730

Page 1

December 03, 2015 10:31:17 AM

Item ID: DSI 9730-011

Accept

N9000040100

Setup Start

NS1

Revision ID:

Item Name: Shim Installation

Stop

NS2

Start Date: 12/3/2015 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan:

Date: 20151203

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI 9730	B

100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP DSI9730-011 CHG001								

DEC 16 2015

110	Pick Kit	0.00							
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110									
Packaging	Memo	0.00							
Packaging									

DEC 03 2015

120	QC4- 100% Inspect kits for completeness	0.00							
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120									
QC	Memo	0.00							
Quality Control									

DEC 16 2015

Work Order ID 139730

139730

Page 2

December 03, 2015 10:31:17 AM

Item ID: DSI 9730-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Shim Installation

Stop

NS2

Start Date: 12/3/2015 Start Qty: 10.00

10

Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				27 9-89			
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP DSI9730-011								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

DEC 16 2015

DEC 16 2015

20151216

Picklist Print

December 03, 2015 10:31:23 AM

Page 1

Work Order ID: 139730

139730

Parent Item: DSI 9730-011

DSI 9730-011

Parent Item Name: Shim Installation

Start Date: 12/3/2015

Required Date: 12/17/2015

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 15.09.04 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D5305-1		Manufactured	No				Each	12.0000	2	20			
D5305-1									**	14 X B 139753			DAS 28 9-89
Shim													

Location	Loc Qty	Loc Code
ST162	12	
137042	12	

MS21920-24		Purchased	No				Each	63.0000	2	20			
MS21920-24									**				DAS 28 9-89
Clamp													

Location	Loc Qty	Loc Code
FG	2	
117998	2	
LG056	61	
m133031	11	
m133316	25	
m133363	25	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-796 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D119-796 REV. 3

REF CANADIAN: STC SH14-45

REF FAA STC: SR03504NY

REF EASA STC: 10052022

1.0 PURPOSE

The purpose of this Dart Service Instruction is to add an aluminum abrasion strip (shim) to the D119-796-101/-103 Fwd Crosstube under the OEM lower clamp assy (P/N 109-0570-20-107) to reduce the abrasion and increase the clamping force on the fwd crosstubes. The DSI9730-011 Kit is available for customers who prefer to use pre-fabricated shims from Dart.

2.0 INSTALLATION

Note: To perform the following installation, the fwd crosstube must be lowered from the aircraft structure sufficiently to allow a minimum gap of 0.50 inches between the mating surfaces of the 109-0570-15-101 Fitting Assy and the D5124-1 Fwd Support.

- 2.1 Remove the (qty 2) 109-0570-20-107 Clamp Assy and (qty 2) outboard MS21920 Clamps and Cushions. Retain hardware.
- 2.2 If not using the DSI9730-011 Shim Kit, fabricate two rectangular shims as per Figure 1 using 16 gauge (0.051in thk) aluminum. Break all sharp edges 0.010in to 0.025in max (0.25mm - 0.64mm). Treat with chemical film material (Alodine 1200 or 1201) per MIL-C-5541.
- 2.3 Form the shims to fit the underside of the crosstube in the location shown in Figure 2. Note that the long axis of the shim is along the circumferential direction of the crosstube.
- 2.4 Abrade mating surfaces of the shims and crosstube with Scotch Brite and remove residue. Apply a minimum 0.020"-0.040" (0.51mm - 1.02mm) thk layer of Proseal 890 B1/2 or B2 on the concave surface of the shims and install in the location shown in Figure 2.
- 2.5 Apply clamping pressure using the outboard MS21920 Clamps with Cushions as well as an additional MS21920 Clamps as shown in Figure 2. Tighten the MS21920 Clamps sufficiently to allow even pressure on the circumference of the shims (do not torque the MS21920 Clamps). Allow Proseal 890 to cure for minimum of 36 hours with clamping pressure.
- 2.6 Torque outboard MS21920-24 Clamps securing the D5124-1 Fwd Supports to the crosstube to 80-100 in-lbs (9.0 - 11.3 Nm)
- 2.7 Remove additional MS21920 Clamps and re-install the D119-796-101/-103 Fwd Crosstube with 109-0570-20-107 Clamps in accordance with applicable Maintenance Instructions.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 15.09.24
CERT. NO.: SH14-45
ISSUE NO.: 1

20151203
SH 139730

B	ADD INSPECTION REQUIREMENTS (SECTION 3)	AP	15.09.24
A	NEW ISSUE	AP	15.08.20
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE, LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV.B
MFG. APPR.	N/A	DSI 9730	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD CROSSTUBE SHIM INSTL	NTS
DATE	15.09.24	COPYRIGHT © 2015 BY DART AEROSPACE, LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE, LTD.	

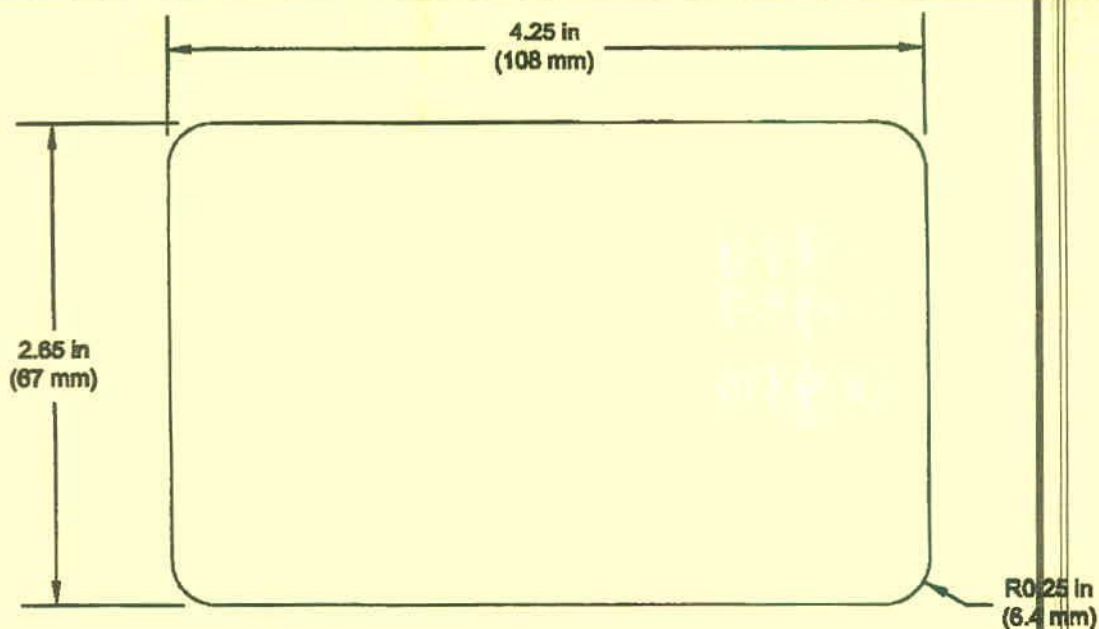


Figure 1: Fwd Crosstube Shim Dimensions (D5305-1 Shim)

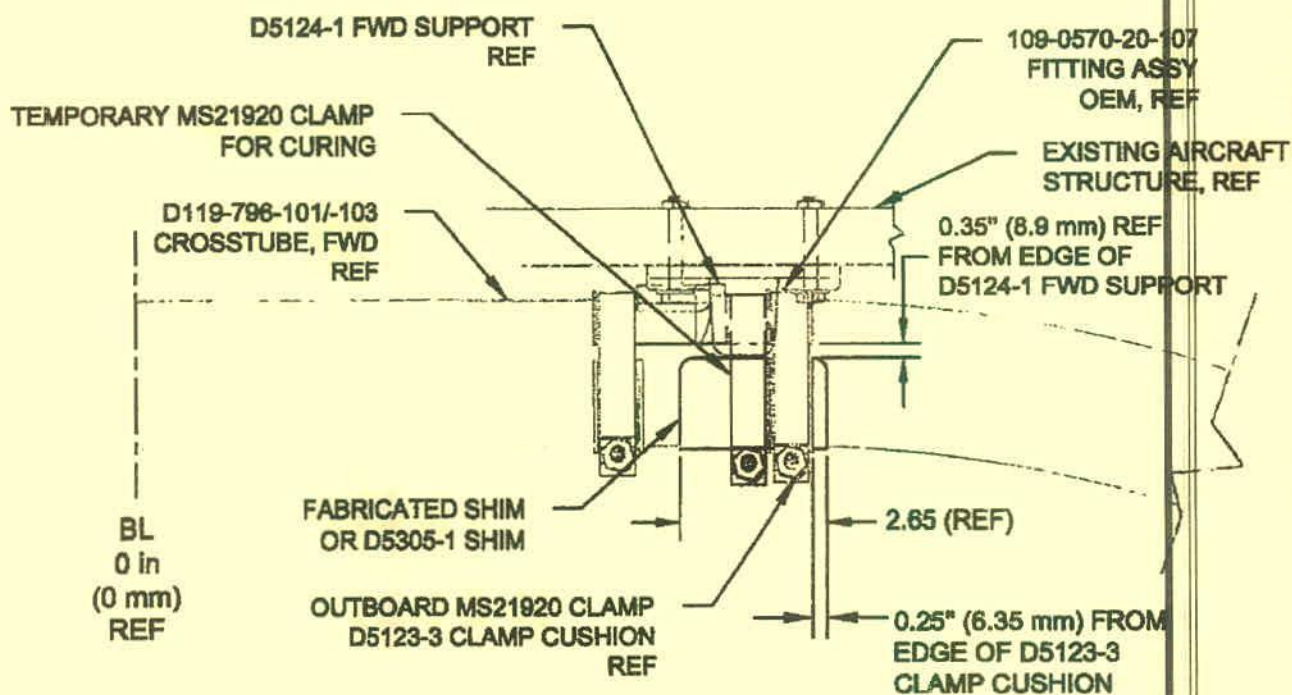


Figure 2: Fwd Crosstube Shim Installation

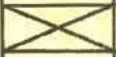
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3.0 AMENDMENT TO ICA-D119-796 REV. 3

The following is to be performed in addition to requirements specified in ICA-D119-796 Rev. 3 Section 5.3, 400 Hour/Annual Inspection.

- 3.1 Inspect D5305-1 Shim for damage, wear and corrosion. Remove damage/corrosion to maximum depth of 0.020in (0.508mm) & touch up affected area in accordance with Section 5.3.12 (ref ICA-D119-796 Rev. 3). Replace D5305-1 if damage exceeds limitations stated above. Inspect for evidence of slipping or disbonding. If slipping or disbonding is found, re-install the D5305-1 Shim in accordance with Section 2.0 of this Service Instruction.

4.0 PARTS LIST

QTY -011	PART NUMBER	DESCRIPTION
	DSI9730-011	SHIM KIT
2	D5305-1	SHIM
2	MS21920-24	CLAMP

5.0 WEIGHT AND BALANCE

There is negligible weight and balance change associated with this modification.

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MFG. APPR.	N/A	DSI 9730	SHEET 3 OF 3
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DE APPR.		FWD CROSSTUBE SHIM INSTL	NTS
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